

We claim:

1. A method of providing a service desk capability, the method comprising:

5 receiving a request for service from at least one customer selected from the group consisting of an internal customer, an external customer, a global customer, and an e-commerce customer;

logging the request;

categorizing the request

10 assigning the request for service;

resolving the request for service;

15 confirming resolution of the request for service; and

closing the request for service.

- 20 2. The method of Claim 1, further comprising escalating the request for service.

- 25 3. The method of Claim 1, wherein the request for service is received via one or more techniques selected from the group consisting of a telephone call, an e-mail message, an Internet message, an Intranet message, a pager message and a facsimile message.

4. The method of Claim 1 further comprising generating a request for service upon detection of a fault in an information technology system.

- 25 5. The method of Claim 1, wherein the request for service includes providing customer information to a central service desk repository.

- 30 6. The method of Claim 1, wherein the request for service is logged via one or more techniques selected from the group consisting of manually logging and automatically logging by an event management capability.

7. The method of Claim 1, wherein the process of logging further comprises noting or recording the type of request, automatically logging the request, and automatically assigning the request.

5 8. The method of Claim 1, wherein the process of logging further comprises noting or recording the type of request, monitoring non-contact calls to the service desk, evaluating the request to determine whether information provided by the customer is sufficient, contacting the customer for more information if necessary, verifying whether the information is correct, updating the information if necessary, and entering the information into a service request.

10 9. The method of Claim 1, wherein the process of categorizing the request includes determining the type of request, assigning a priority to the request, and sending the request for resolution.

15 20 10. The method of Claim 1, wherein the process of logging further comprises noting or recording the type of request, verifying information provided by the customer, determining whether the information is correct, updating the information if necessary, and entering the information into a service request.

25 11. The method of Claim 1, wherein the process of categorizing the request includes determining the type of request, assigning a priority to the request, and sending the request for resolution.

30 12. The method of Claim 1, wherein the process of assigning the request includes evaluating whether an operator can resolve the request, resolving the request if the operator is able to, and releasing the customer from the call.

13. The method of Claim 1, wherein the process of assigning the request includes evaluating whether an operator is able to resolve the request, and if not, determining an appropriate resource to resolve the request, and assigning the resource to resolve the request.

5

14. The method of Claim 13, further comprising determining whether the request is urgent, and if so, facilitating an assignment of the resource.

10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30

15. The method of Claim 1, wherein the process of resolving the request includes diagnosing the request, searching a knowledge base if necessary to resolve the request, determining whether a solution is known, and resolving the request if a solution is known.

16. The method of Claim 15, further comprising confirming resolution of the request by notifying the customer of the resolution and confirming with the customer that the request is resolved, and closing the request if the customer agrees, while requesting assignment or resolution of the request if the customer does not agree.

20

17. The method of Claim 1, wherein the process of resolving the request includes diagnosing the request, searching a knowledge base to resolve the request, checking whether an amount of time to resolve the request has exceeded an agreed-upon time, and if so, documenting steps taken to resolve the request, and requesting reassignment of the request.

25

18. The method of Claim 1, wherein the process of closing the request includes documenting the solution, entering the solution into a knowledge database if the solution was not already in the knowledge database, and closing the request.

30

19. The method of Claim 1, wherein the process of resolving the request includes analyzing and diagnosing the request, resolving the request,

documenting a solution to the request, and closing or confirming resolution of the request.

5 20. The method of Claim 1, wherein the process of resolving the request includes analyzing and diagnosing the request, checking whether an agreed-upon time for resolving the request has been exceeded, and if so, requesting reassignment of the request.

10 21. The method of Claim 2, wherein the process of escalating the request includes following notification procedures, determining a status of the service request, evaluating whether escalating is appropriate, and assigning the service request to a higher tier.

15 22. The method of Claim 1, wherein assigning the request is accomplished by one or more techniques selected from the group consisting of manual notification, a telephone call, an e-mail message, a pager message, and a service-desk tool-set application.

20 23. The method of Claim 1, wherein categorizing is accomplished by a technique selected from the group consisting of manual categorizing and automatic categorizing.

25 24. The method of Claim 1, wherein categorizing is used to accomplish at least one goal selected from the group consisting of determining the correct person or group to assign the request for service, enabling trend analysis of requests for service, providing cause and effect analysis, and providing a starting point for a knowledge tool mechanism.

30 25. The method of Claim 1, wherein the request for service is categorized before assigning and after receiving the request for service.

26. The method of Claim 1, wherein the request for service is categorized according to a multi-level hierarchy of categorization.

5 27. The method of Claim 1, wherein the request for service is categorized according to at least one of a service request type and a service request priority.

10 28. The method of Claim 1, wherein resolving the request for service is accomplished by using at least one tool selected from the group consisting of problem checklists, lists of error messages and probable causes of an error, a knowledge database, a search facility, remote access, and a diagnostic facility.

15 29. The method of Claim 1, further comprising escalating the request for service if the request for service is not resolved within a time specified by a service level agreement.

20 30. The method of Claim 1, further comprising quantitatively tracking, monitoring, and reporting service desk performance, including one or more reports selected from the group consisting of service level agreement compliance, first pass resolution, first call resolution, call abandonment rate, call wait time, Tier 1 resolution rate, Tier 2 resolution rate, Tier 3 resolution rate, number of open requests, number of logged requests and solved requests, and number of complaints.

25 31. The method of Claim 1, further comprising qualitatively tracking, monitoring, and reporting service desk performance, including one or more reports selected from the group consisting of volunteered comments and customer surveys.

32. The method of Claim 1, further comprising analyzing the request for service to determine a root cause for repeated service requests and chronic problems.

5 33. The method of Claim 1, wherein the service desk capability is provided from one or more locations selected from the group consisting of a centralized location, a centralized location and at least one distributed staff member, and a decentralized capability having no single central location.

10 34. The method of Claim 1 further comprising using at least one tool selected from the group consisting of number identification service, automatic number identification, automatic call distribution, a voice response unit, and computer telephone integration.

15 35. The method of Claim 1, wherein the service desk capability is selected from the group consisting of information technology, human resources, finance, engineering, medicine, nursing, procedure, insurance, retail, and legal resources.

20 36. The method of Claim 1, further comprising using queuing theory to determine the number of staff required for the service desk capability.

25 37. The method of Claim 36, wherein the service desk capability is designed for an average speed of answer from 1 sec to 100 sec.

30 38. The method of Claim 36, wherein the service desk capability is designed for sufficient staffing that a minimum of 90% of calls are answered within a time objective.

30 39. The method of Claim 36, wherein the service desk capability is designed for staff sufficient that no more than 5% of calls are abandoned.

40. A method of providing a service desk capability under a service level agreement, the method comprising:

receiving a request for service from a customer selected from the group consisting of an external customer, a global customer and an e-commerce customer;

logging the request;

categorizing the request;

assigning the request for service;

resolving the request for service;

confirming resolution of the request for service; and

closing the request for service.

41. The method of Claim 40, further comprising escalating the request for service.

42. The method of Claim 40, further comprising qualitatively tracking, monitoring, and reporting service desk performance, including one or more reports selected from the group consisting of volunteered comments and customer surveys.

43. The method of Claim 40, wherein the service level agreement is for an average speed of answer from 1 sec to 100 sec.

44. The method of Claim 40, wherein the service level agreement is for a minimum of 90% of calls to be answered within a time objective.

45. The method of Claim 40, wherein the service desk agreement is for no more than 5% of calls to be abandoned.

46. The method of Claim 40, wherein the service desk capability is selected from the group consisting of information technology, human

resources, finance, engineering, medicine, nursing, procedure, insurance, retail, and legal resources.

47. A method of providing a service desk capability, the method comprising:

receiving information about a service problem from a customer selected from the group consisting of an external customer, a global customer and an e-commerce customer, the information received from one or more techniques selected from the group consisting of a telephone call, an e-mail message, an Internet message, an Intranet message, a paper message and a facsimile message;

logging the problem by noting the type of problem, verifying the information provided by the customer, determining whether the information provided correctly states the problem, updating the information if necessary, and entering the information into a service request;

categorizing the service request by determining the type of request and assigning a priority to the request;

evaluating whether an operator can resolve the request, and if so, then assigning the request to the operator;

resolving the request within a predetermined period of time or escalating the request;

confirming resolution of the request;

identifying new solutions of service requests and entering the solutions into a knowledge management repository;

identifying service requests which are for a new type of service request, a service request with a high impact, and a service request with a high severity, and if so, analyzing said service requests for a root cause;

generating quantitative data concerning service desk performance of the service request; and

closing the request.

48. The method of claim 47 further comprising generating a report of service desk performance by gathering quantitative data from a plurality of service requests.

5 49. The method of Claim 47, further comprising generating a request for service upon detection of a fault in an information technology system.

 50. The method of Claim 47, wherein the customer is an internal customer.

 51. The method of Claim 47, wherein quantitative data are selected from the group consisting of service level agreement compliance, first pass resolution, first call resolution, call abandonment rate, call wait time, Tier 1 resolution rate, Tier 2 resolution rate, Tier 3 resolution rate, number of open requests, number of logged requests and solved requests, and number of complaints.

 52. The method of Claim 47, wherein the service desk capability is selected from the group consisting of information technology, human resources, finance, engineering, medicine, nursing, procedure, insurance, retail, and legal resources.

 53. A service desk for customers selected from the group consisting of an external customer, a global customer and an e-commerce customer, the service desk comprising:

- a service desk computer network accessible by customers;
- a system for solving problems and incidents reported by customers;
- a system for confirming resolution of the problems and incidents reported;
- a system for closing said problems and incidents; and

at least one service desk repository for storing information useful in solving problems and incidents, said repository accessible by the computer network.

5 54. The service desk of Claim 53, wherein the system for solving problems and incidents includes problem checklists, lists of error messages and probable causes of an error, a knowledge database, an asset database, a search facility, remote access capability, and a diagnostic facility.

10 55. The service desk of Claim 53, wherein the system for solving problems and incidents includes a multi-level hierarchy for categorizing said problems and incidents.

15 56. The service desk of Claim 53, wherein the system for solving problems and incidents includes at least one tool selected from the group consisting of number identification service, automatic number identification, automatic call distribution, a voice response unit, and computer telephone integration.

20 57. The service desk of Claim 53 wherein the problems and incidents are selected from the group consisting of information technology, human resources, finance, engineering, medicine, nursing, procedure, insurance, retail, and legal resources.

25 58. The service desk of Claim 53, wherein the system for solving problems and incidents includes a prioritization schedule.

30 59. The service desk of Claim 53, wherein the system for solving problems and incidents includes a system for assigning said problems and incidents selected from the group consisting of a telephone, a radio, a pager, a computer program, a facsimile machine, and a computer.

60. The service desk of Claim 53, wherein problems and incidents reported to the service desk are divided into three tiers.

5 61. The service desk of Claim 53, wherein the service desk computer network and service desk operators are at one or more locations selected from the group consisting of a centralized location, a centralized location and at least one distributed staff location, and a decentralized location having no single central location.

10 62. The service desk of Claim 53, wherein the system for confirming resolution of requests includes telephone calls, e-mail messages, facsimile messages and user surveys.

15 63. The service desk of Claim 53, wherein the system for closing said problems and incidents includes rules for documenting a solution to a problem or an incident and entering the solution into the repository if the solution was not previously known.

20 64. A service desk for customers selected from the group consisting of an internal customer, an external customer, a global customer and an e-commerce customer, the service desk comprising:

25 a service desk computer network accessible by customers;
 a system for solving problems and incidents reported by customers;
 a system for confirming resolution of the problems and incidents reported;
 a system for closing said problems and incidents; and
 at least one service desk repository for storing information useful in solving problems and incidents, said repository accessible by the computer network.

10 9 8 7 6 5 4 3 2 1

20

25

30

65. The service desk of Claim 64, wherein the system for solving problems further comprises at least one tool selected from the group consisting of number identification service, automatic number identification, automatic call distribution, a voice response unit, computer telephone integration, expert systems, knowledge tools, an automatic logging tool, an automatic tracking tool, an automatic reporting tool, and a web-enabled service desk tool.

66. The service desk of Claim 64, wherein the service desk further comprises a system for gathering at least one datum selected from the group consisting of service level agreement compliance, first pass resolution, first call resolution, call abandonment rate, call wait time, Tier 1 resolution rate, Tier 2 resolution rate, Tier 3 resolution rate, number of open requests, number of logged requests and solved requests, number of complaints, volunteered comments and customer surveys.

67. The service desk of Claim 64 wherein the problems and incidents are selected from the group consisting of information technology, human resources, finance, engineering, medicine, nursing, procedure, insurance, retail, and legal resources.